

**(Attorney Docket No. 03-380)**

**Examiner: Jeffrey D. Carlson**

**David L. Ciesielski**  
**McDONNELL BOEHNEN**  
**HULBERT & BERGHOFF LLP**  
**300 South Wacker Drive**  
**Chicago, Illinois 60606**  
**(312) 913-0001**

**(Attorney Docket No. 03-380)**

**Examiner: Jeffrey D. Carlson**

# APPEAL BRIEF

This Appeal Brief is submitted pursuant 37 C.F.R. § 41.37, within two months from November 3, 2009, the mailing date of the Notice of Panel Decision from Pre-Appeal Brief Review. The Office is authorized to charge the large entity Appeal-Brief fee (\$540.00) and the extension of time fee (\$130.00) required under 37 C.F.R. § 1.17)(a) for a one month extension of time to Deposit Account No. 132490 and is generally authorized to charge any underpayment or credit any overpayment in this matter to the same deposit account.

## Table of Contents

I.	Real Party in Interest .....	1
II.	Related Appeals and Interferences .....	1
III.	Status of Claims .....	1
IV.	Status of Amendments .....	1
V.	Summary of Claimed Subject Matter.....	1
VI.	Grounds of Rejection to Be Reviewed on Appeal .....	4
VII.	Argument .....	5
	Claims Appendix .....	20
	Evidence Appendix .....	26
	Related Proceedings Appendix .....	27

## **I. Real Party in Interest**

The real party in interest is the DirecTV Group, Inc., to which this invention is assigned.

## **II. Related Appeals and Interferences**

Appellant is not aware of any related appeals or interferences.

## **III. Status of Claims**

Pending and under appeal are claims 1-3, 5, 7, 8, 11-15, 17-21, 23, 31, 38, 39, 61-63, 68-75, 78-81, and 84-89, of which claims 1 and 38 are independent and the remainder are dependent. Claims 4, 6, 9, 10, 16, 22, 24-30, 32-37, 40-60, 64-67, 76, 77, 82, and 83 are cancelled. A clean set of the pending claims is attached in the Claims Appendix.

## **IV. Status of Amendments**

Claims 74, 75, 78, and 79 were amended after the final rejection. The Advisory Action mailed September 11, 2009 states that the proposed amendments were entered.

## **V. Summary of Claimed Subject Matter**

As noted above, there are two independent claims: claims 1 and 38. These claims relate generally to video data recorders, and more specifically, to a method and system for determining and playing ads in video data recorders.

Claim 1 recites a method of re-evaluating an order of a plurality of ads (*see, e.g.,* specification, page 9, line 28, to page 10, line 3, and page 21, lines 4-5), the method comprising: (i) a client receiving from a remote server the plurality of ads and a plurality of ad control files (*see, e.g.,* specification, page 6, lines 1-2, and page 13, lines 5-6), wherein each of the ad control files is associated with a respective ad of the plurality of ads (*see, e.g.,* specification, page 13, lines 5-6), wherein at least one of the ad control files includes a trigger parameter (*see, e.g.,* specification, page 14, lines 5-7, and Fig. 7b), wherein each of the ads is associated with a

respective placement value (*see, e.g., specification, page 14, line 23*), and wherein at least one of the ads is associated with a respective weight value (*see, e.g., specification, page 14, lines 23-24 and page 15, lines 9-10*); the client determining the respective weight value for each ad that is associated with a respective weight value (*see, e.g., specification, page 15, lines 9-10*), wherein the client uses a weight rule contained in the ad control file associated with the ad so as to determine the weight value associated with the ad (*see, e.g., specification, page 13, lines 5-12, page 14, lines 23-24. and Fig. 5*), and wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed (*see, e.g., specification at page 17, lines 7-13*), (ii) the client maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files (*see, e.g., specification, page 15, lines 3-5, and Fig. 7b*), wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads (*see, e.g., Fig. 7b*), and (iii) the client updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, (*see, e.g., specification, page 15, lines 11-13*) and if so, re-evaluating the placement value of each ad of the plurality of ads (*see, e.g., specification, page 15, lines 13-14*), and thereafter the client re-evaluating the order of the plurality of ads to determine a next ad to be displayed (*see, e.g., specification, page 9, line 28, to page 10, line 3, Fig. 3, and Fig. 9b*), wherein the order of the plurality of ads is indicated by a data structure (*see, e.g., specification, page 9, line 28, to page 10, line 3, Fig. 3, and Fig. 8*), and wherein the client re-evaluating the order of the plurality of ads includes for each of the at least one of the ads associated with a respective weight value (*see, e.g., specification, page 14, lines 20-26*), the client multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad

(*see, e.g., specification, page 14, lines 22-26*), and the client placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad (*see, e.g., specification, page 14, line 28, to page 15, line 1*).

Claim 38 recites a method of displaying an ad on a client-side machine (*see, e.g., specification, page 25, line 6*), comprising: (i) storing a plurality of ads on the client-side machine (*see, e.g., specification, page 25, line 7*), wherein each of the ads is associated with a respective placement value (*see, e.g., specification, page 14, line 23*), and wherein at least one of the ads is associated with a respective weight value (*see, e.g., specification, page 14, lines 23-24 and page 15, lines 9-10*), (ii) the client-side machine receiving from a remote server a plurality of ad control files (*see, e.g., specification, page 6, lines 1-2, and page 13, lines 5-6*), wherein each of the ad control files is associated with a respective ad of the plurality of ads (*see, e.g., specification, page 13, lines 5-6*), and wherein at least one of the ad control files includes a trigger parameter (*see, e.g., specification, page 14, lines 5-7, and Fig. 7b*), (iii) the client-side machine determining the respective weight value for each ad that is associated with a respective weight value (*see, e.g., specification, page 15, lines 9-10*), wherein the client-side machine uses a weight rule contained in the ad control file associated with the ad so as to determine the weight value associated with the ad (*see, e.g., specification, page 13, lines 5-12, page 14, lines 23-24, and Fig. 5*), and wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed (*see, e.g., specification at page 17, lines 7-13*), (iv) the client-side machine maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files (*see, e.g., specification, page 15, lines 3-5, and Fig. 7b*), wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads (*see, e.g., Fig. 7b*), and the client-

side machine updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads (*see*, e.g., specification, page 15, lines 11-13), and if so, re-evaluating the placement value of each ad of the plurality of ads (*see*, e.g., specification, page 15, lines 13-14), and thereafter the client-side machine re-evaluating an order of the plurality of ads so as to determine a next ad to be displayed (*see*, e.g., specification, page 9, line 28, to page 10, line 3, Fig. 3, and Fig. 9b), and (vi) displaying the next ad to be displayed when the client-side machine encounters an ad display opportunity (*see*, e.g., specification, page 25, lines 10-11), wherein the order of the plurality of ads is indicated by a data structure (*see*, e.g., specification, page 9, line 28, to page 10, line 3, Fig. 3, and Fig. 8), and wherein the client-side machine re-evaluating the order of the ads includes for each of the at least one of the ads associated with a respective weight value (*see*, e.g., specification, page 14, lines 20-26), the client-side machine multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad (*see*, e.g., specification, page 14, lines 22-26), and the client-side machine placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad (*see*, e.g., specification, page 14, line 28, to page 15, line 1).

## **VI. Grounds of Rejection to Be Reviewed**

a. Claims 1-3, 5, 7, 8, 11-15, 17-21, 23, 38, 61-63, 68-75, 78-81, and 84-89 stand rejected under 35 U.S.C. § 103 (a) as being allegedly unpatentable over U.S. Patent Application Publication No. 2002/0083439 (Eldering) in view of U.S. Patent No. 5,848,397 (Marsh).

b. Claims 31 and 39 stand rejected under 35 U.S.C. § 103 (a) as being allegedly unpatentable over Eldering in view of Merriman et al. and U.S. Patent No. 7,017,173 (Armstrong).

## VII. Argument

**a. The Examiner clearly erred in rejecting claims 1 and 38 under 35 U.S.C. § 103(a)**

Appellant submits that the Examiner's rejections of claims 1 and 38 are clearly erroneous, at a minimum, because the Examiner failed to establish *prima facie* obviousness of either of these claims over Eldering in view of Marsh.

Although the Examiner provided considerable remarks with regard to claims 1 and 38, Eldering and Marsh do not reasonably or logically lead to the innovative arrangement of features recited by Appellant's claims, including (i) the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed, and (ii) for each of the at least one of the ads associated with a respective weight value, the client multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad. This interrelated combination of features comes from Appellant's claims, not from the cited art. Thus, *prima facie* obviousness of claims 1 and 38 does not exist.

Further, the Examiner clearly failed to establish *prima facie* obviousness of claims 1 and 38 under M.P.E.P. § 2142, because, notwithstanding the Examiner's remarks, the Examiner did not articulate reasoning with rational underpinnings to actually support the Examiner's conclusion of obviousness.



At a minimum, for instance, when rejecting claims 1 and 38, the Examiner did not establish that Eldering and Merriman would have led a person having ordinary skill in the art at the time of Appellant's invention to claims including a feature in which *the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed.*

In rejecting claims 1 and 38, the Examiner stated Eldering's collection of targeting metadata for each ad is taken to represent the claimed "ad control files," whereby each targeting parameter of Eldering relates to the claimed trigger parameters. *See*, final office action, page 3, lines 19-21. The Examiner stated Marsh teaches that a server can deliver the advertising content as well as the metadata ("ad control information" such as expiration, maximum user impressions, etc.) needed for the client to determine queue sorting and advertisement placement. The Examiner also stated that one of the aspects deemed important to advertising sorting and display is sorting the queue based on 'time since last seen' (tsls) as well as an (advertised-special) criteria for each ad, namely pre-defined weights such as  $c2=TSLS\_WEIGHT$ . These are used in a typical equation which multiplies terms with coefficients to determine a queue order of ads, and the ads can be displayed in accordance with the queue. *See*, final office action, page 4, lines 10-18.

As stated above, the Examiner identified Eldering's metadata as the claimed "ad control files," and the Examiner identified Marsh's "ad control information" as metadata. Eldering discloses advertisements and advertisement metadata, including advertisement resource locators (ARLs) are delivered by one or more channels of a head end system. *See*, Eldering, paragraph 0074. Eldering does not disclose or suggest metadata that includes an equation for calculating a weight value that increases proportionately to time passed.

Marsh discloses that each advertisement includes control information such as the expiration date for the advertisement and the maximum number of times the advertisement may be shown to a user, along with a priority assigned by the server system (e.g., HIGH, MEDIUM, LOW, NO). *See*, Marsh, column 8, lines 49-54. Marsh also discloses that in a representative embodiment, certain predetermined characteristics of the advertisements contained therein include time to expiration (tte), time since last seen (tsls), maximum exposures (me), and percent remaining exposures (pre). *See*, Marsh, column 9, lines 43-47. By way of example, Marsh discloses that for an advertisement referred to as “MSG<sub>1</sub>,” tte has a value of 5 days, tsls has a value of 1 hour, me has a value of 100, and pre has a value of 40, and a client system can substitute the values into a hyperplane equation. *See*, Marsh, column 10, lines 61-65, and column 11, lines 60-65.

Even if it is assumed, for the sake of argument, that a person having ordinary skill in the art at the time of Appellant’s invention would have modified Eldering so that Eldering’s metadata included Marsh’s predetermined characteristics of the advertisement such as tte, tsls, me, and pre, and so that a client system of Eldering substituted the values of the predetermined characteristics into a hyperplane equation, Appellant submits that the combination of Eldering and Marsh do not reasonably lead to *wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed*, as recited in claims 1 and 38.

Furthermore, even if it is assumed, for the sake of argument, that the Marsh’s hyperplane equation is contained within an ad control file for a given ad and that the hyperplane equation is used to determine a weight value for that ad, Appellant submits that the combination of Eldering and Marsh do not reasonably lead to multiplying a re-evaluated placement value associated with

the given ad by the weight value associated with the given ad so as to determine a weighted placement value for the given ad.

Marsh defines the hyperplane equation as:  $(c_1 * x_1) + (c_2 * x_2) + (c_3 * x_3) + (c_4 * x_4) = 0$ , where  $x_1 = tte$ ,  $x_2 = tsls$ ,  $x_3 = me$ , and  $x_4 = pre$ , and  $c_1$ ,  $c_2$ ,  $c_3$ , and  $c_4$  are weighting constants. See, Marsh, column, 10, lines 33-52. The values of  $x_1$ ,  $x_2$ ,  $x_3$ , and  $x_4$  are delta values computed using the values maintained by an advertisement display scheduler. See, Marsh, column 10, lines 61-64. According to Marsh, a negative result for the hyperplane equation is arbitrarily defined to mean that a first advertisement should be shown before a second advertisement, and a positive result means the second should be shown before the first.

Appellant submits that the combination of Eldering and Marsh's disclosure of using a positive or negative result of the hyperplane equation to determine which of two advertisements should be shown before the other advertisement does not reasonably lead to (i) for each of the at least one of the ads associated with a respective weight value, the client ***multiplying the re-evaluated placement value associated with that ad by the weight value*** associated with that ad so as to determine a weighted placement value for that ad, as recited in claim 1, and (ii) for each of the at least one of the ads associated with a respective weight value, the client-side machine ***multiplying the re-evaluated placement value associated with that ad by the weight value*** associated with that ad so as to determine a weighted placement value for that ad, as recited in claim 38.

Therefore, notwithstanding the Examiner's remarks about what Eldering and Merriman allegedly teach, *prima facie* obviousness of claims 1 and 38 does not exist, and the Examiner clearly erred in alleging that the inventions recited in claims 1 and 38 would have been obvious

and thus in rejecting claims 1 and 38. Accordingly, Appellant submits that claims 1 and 38 are in condition for allowance.

**b. The Examiner clearly erred in rejecting claims 2, 3, 5, 7, 8, 11-15, 17-21, 23, 61-63, 68-75, 78-81, and 84-89 under 35 U.S.C. § 103(a)**

Without conceding the Examiner's assertions regarding dependent claims 2, 3, 5, 7, 8, 11-15, 17-21, 23, 61-63, 68-75, 78-81, and 84-89, Appellant submits that the Examiner clearly erred in rejecting dependent claims 2, 3, 5, 7, 8, 11-15, 17-21, 23, 61-63, 68-75, 78-81, and 84-89, and Applicant submits that dependent claims 2, 3, 5, 7, 8, 11-15, 17-21, 23, 61-63, 68-75, 78-81, and 84-89 are allowable for at least the reason that each of these claims depends from one of the allowable independent claims.

**c. The Examiner clearly erred in rejecting claims 31 and 39 under 35 U.S.C. § 103(a)**

In the office action mailed September 11, 2009, the Examiner stated, "Claims 31, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering in view of Merriman et al and Armstrong et al (US7017173)." *See*, final office action, page 7, section 5, lines 1-2. Appellant submits that the Examiner's rejections of claims 31 and 39 are clearly erroneous, at a minimum, because the Examiner failed to establish *prima facie* obviousness of either of these claims over Eldering in view of Merriman et al. and Armstrong et al.

At a minimum, the Examiner clearly failed to establish *prima facie* obviousness of claims 31 and 39 under M.P.E.P. § 2142 because the Examiner did not articulate any reasoning with rational underpinnings to actually support the Examiner's conclusion of obviousness. In particular, the Examiner did not articulate any reasoning as to how Merriman et al. is used to render claims 31 and 39 obvious or why a person having ordinary skill in the art at the time of Appellant's invention would have modified Eldering with Merriman et al.

Furthermore, in the office action mailed September 11, 2009, the Examiner did not provide any identification of Merriman et al. except for "Merriman et al." Although the Examiner cited to U.S. Patent No. 5,948,061 (Merriman et al.) in an office action mailed December 19, 2008, the Examiner did not state whether Merriman et al. (used to reject claims 31 and 39 in the office action mailed September 11, 2009) is U.S. Patent No. 5,948,061 or some other publication.

Furthermore still, under 35 U.S.C. § 112, fourth paragraph, a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers. Since claim 31 depends from claim 61, and claim 61 depends from claim 1, claim 31 shall be construed to incorporate by reference all the limitation of claim 1. Likewise, since claim 39 depends from claim 38, claim 39 shall be construed to incorporate by reference all the limitations of claim 38. Although the Examiner alleged that Eldering and Marsh disclose all of the limitations of claims 1 and 38, the Examiner did not articulate any reasoning as to how Eldering, Merriman et al, and Armstrong disclose or suggest all of the limitations of claims 1 and 38, which are incorporated by reference into claims 31 and 39, respectively.

Thus, notwithstanding the Examiner's statement about what Eldering and Armstrong allegedly teach, *prima facie* obviousness of claims 31 and 39 clearly does not exist, and the Examiner clearly erred in alleging that claims 31 and 39 would have been obvious and thus in rejecting claims 31 and 39. Accordingly, Appellant submits that claims 31 and 39 are in condition for allowance.

**d. Conclusion**

Appellant has demonstrated that the rejections of claims 1-3, 5, 7, 8, 11-15, 17-21, 23, 31, 38, 39, 61-63, 68-75, 78-81, and 84-89 are in error as a matter of law. Appellant therefore requests reversal of the rejections and allowance of the claims.

Respectfully submitted,

**McDONNELL BOEHNEN  
HULBERT & BERGHOFF LLP**

Date: December 30, 2009

By: /David L. Ciesielski/  
David L. Ciesielski  
Reg. No. 57,432

## CLAIMS APPENDIX

1. (Previously presented) A method of re-evaluating an order of a plurality of ads, the method comprising:

a client receiving from a remote server the plurality of ads and a plurality of ad control files, wherein each of the ad control files is associated with a respective ad of the plurality of ads, wherein at least one of the ad control files includes a trigger parameter, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

the client determining the respective weight value for each ad that is associated with a respective weight value, wherein the client uses a weight rule contained in the ad control file associated with the ad so as to determine the weight value associated with the ad, and wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed;

the client maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads; and

the client updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter the client re-evaluating the order of the plurality of ads to determine a next ad to be displayed,

wherein the order of the plurality of ads is indicated by a data structure, and

wherein the client re-evaluating the order of the plurality of ads includes (i) for each of the at least one of the ads associated with a respective weight value, the client multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) the client placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

2. (Previously presented) The method of claim 12, wherein the change of viewing context in the client reflects a change in a video stream being viewed by a user of the client.

3. (Previously presented) The method of claim 2, wherein the change of viewing context in the client includes a channel change.

4. (Cancelled)

5. (Previously presented) The method of claim 1,  
wherein re-evaluating the order of the plurality of ads includes re-ordering the data structure, and

wherein the data structure contains pointers to ads of the plurality of ads.

6. (Cancelled)



7. (Previously presented) The method of claim 1, wherein re-evaluating the order of the plurality of ads further includes evaluating an interpreted placement rule for at least some of the ads.

8. (Original) The method of claim 1, wherein the client is a video replay system.

9-10. (Cancelled)

11. (Previously presented) The method of claim 1, wherein the next ad to be displayed is an ad at the top of the data structure after re-evaluating the order of the plurality of ads.

12. (Previously presented) The method of claim 61, wherein receiving the ad request includes receiving the ad request asynchronously to receiving a notification of a change of viewing context in the client.

13. (Previously Presented) The method of claim 61, wherein sending the determined next ad to be displayed includes sending an ad on the top of the data structure.

14. (Previously Presented) The method of claim 61, wherein sending the determined next ad to be displayed includes sending a next ad having a highest weighted placement value in accordance with a placement rule and a weight rule of the ad.

15. (Previously Presented) The method of claim 61, further comprising:  
re-evaluating the ordering of the plurality of ads after an ad is returned in response to the  
ad request.

16. (Cancelled)

17. (Original) The method of claim 1, wherein the next ad to be displayed is a  
full-page ad.

18. (Original) The method of claim 1, wherein the next ad to be displayed is a  
banner ad.

19. (Previously Presented) The method of claim 1, wherein the next ad to be  
displayed is an ad displayable in a predetermined location on a display device.

20. (Previously presented) The method of claim 1, wherein each ad of the  
plurality of ads has an associated rule set containing a placement rule and at least one local  
parameter value.

21. (Previously presented) The method of claim 1, wherein at least one ad of  
the plurality of ads has an associated placement rule.

22. (Cancelled)

23. (Previously presented) The method of claim 1, wherein at least one ad of the plurality of ads has an associated expiration rule.

24-30. (Cancelled)

31. (Previously Presented) The method of claim 61, further comprising:  
at the client, entering a pause mode to pause currently viewed programming,  
wherein sending the determined next ad includes sending the determined next ad when the client enters the pause mode.

32-37. (Cancelled).

38. (Previously presented) A method of displaying an ad on a client-side machine, comprising:

storing a plurality of ads on the client-side machine, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

the client-side machine receiving from a remote server a plurality of ad control files, wherein each of the ad control files is associated with a respective ad of the plurality of ads, and wherein at least one of the ad control files includes a trigger parameter;

the client-side machine determining the respective weight value for each ad that is associated with a respective weight value, wherein the client-side machine uses a weight rule

contained in the ad control file associated with the ad so as to determine the weight value associated with the ad, and wherein the weight rule of at least one of the ad control files comprises an equation for calculating a weight value that increases proportionately to time passed;

the client-side machine maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads; and

the client-side machine updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter

the client-side machine re-evaluating an order of the plurality of ads so as to determine a next ad to be displayed; and

displaying the next ad to be displayed when the client-side machine encounters an ad display opportunity,

wherein the order of the plurality of ads is indicated by a data structure, and

wherein the client-side machine re-evaluating the order of the ads includes: (i) for each of the at least one of the ads associated with a respective weight value, the client-side machine multiplying the re-evaluated placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) the client-side machine placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

39. (Previously Presented) The method of claim 38, wherein the ad display opportunity occurs when a user pauses a currently viewed program.

40-60. (Cancelled)

61. (Previously presented) The method of claim 1, further comprising:  
receiving an ad request from a requesting application; and  
in response to receiving the ad request, sending to the requesting application the determined next ad to be displayed.

62. (Previously Presented) The method of claim 1, wherein the data structure is a heap data structure.

63. (Previously Presented) The method of claim 38, wherein the data structure is a heap data structure.

64-67. (Cancelled)

68. (Previously presented) The method of claim 1, wherein at least one trigger parameter of the trigger table is associated with two or more ads.

69. (Previously presented) The method of claim 1, wherein a trigger parameter of the plurality of trigger parameters is selected from the group consisting of (i) a parameter that

indicates time of day, (ii) a parameter indicating day of week, (iii) a parameter indicating day of month, (iv) a parameter indicating day of year, and (v) a parameter indicating month of year.

70. (Previously presented) The method of claim 1, wherein at least one ad control file of the plurality of ad control files is encoded in XML format.

71. (Previously presented) The method of claim 1, wherein each of the ad control files comprises a rule set that describes the ad associated with the ad control file.

72. (Previously presented) The method of claim 71, wherein a rule set of a given ad control file comprises a rule for determining an expiration date of the ad associated with the ad control file.

73. (Previously presented) The method of claim 38, further comprising:  
after displaying the next ad to be displayed, logging information at the client-side machine, wherein the logged information indicates that next ad to be displayed has been displayed, and

passing the logged information from the client-side machine to a server that provided the plurality of ads to the client-side machine.

74. (Previously presented) The method of claim 1,  
wherein each ad control file includes an ad placement value rule, and

wherein re-evaluating the placement value of each ad is carried out in accordance with the ad placement value rule in the ad control file associated with the ad.

75. (Previously presented) The method of claim 38,  
wherein each ad control file includes an ad placement value rule, and  
wherein re-evaluating the placement value of each ad is carried out in accordance with the ad placement value rule in the ad control file associated with the ad.

76-77. (Cancelled)

78. (Previously presented) The method of claim 1, wherein the client receives the plurality of ads and the plurality of ad control files from a remote server.

79. (Previously presented) The method of claim 38, wherein the client receives the plurality of ads and the plurality of ad control files from a remote server.

80. (Previously presented) The method of claim 1,  
wherein each respective weight value for at least one of the ads is a constant weight value.

81. (Previously presented) The method of claim 38,  
wherein each respective weight value for at least one of the ads is a constant weight value.

82-83. (Cancelled)

84. (Previously presented) The method of claim 1, wherein the equation for calculating the weight value comprises a variable time parameter.

85. (Previously presented) The method of claim 84, wherein the variable time parameter is specified in epoch seconds.

86. (Previously presented) The method of claim 38, wherein the equation for calculating the weight value comprises a variable time parameter.

87. (Previously presented) The method of claim 86, wherein the variable time parameter is specified in epoch seconds.

88. (Previously presented) The method of claim 72, wherein the rule for determining the expiration date of the ad comprises an equation including a variable time parameter.

89. (Previously presented) The method of claim 88, wherein the variable time parameter is specified in epoch seconds.



## **EVIDENCE APPENDIX**

This appendix is empty.

## **RELATED PROCEEDINGS APPENDIX**

This appendix is empty.